

0590
0702

4



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/073,300

DATE: 07/09/2002

TIME: 14:03:46

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\07092002\J073300.raw

ENTERED

```

3 <110> APPLICANT: Reiter, Yoram
5 <120> TITLE OF INVENTION: SINGLE CHAIN CLASS I MAJOR HISTO- COMPATIBILITY COMPLEXES
7 <130> FILE REFERENCE: 02/23339
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/073,300
C--> 9 <141> CURRENT FILING DATE: 2002-06-25
9 <160> NUMBER OF SEQ ID NOS: 20
11 <170> SOFTWARE: PatentIn version 3.0
14 <210> SEQ ID NO: 1
16 <211> LENGTH: 9
18 <212> TYPE: PRT
C--> 20 <213> ORGANISM: Artificial
24 <220> FEATURE:
26 <223> OTHER INFORMATION: synthetic peptide
28 <400> SEQUENCE: 1
30 Ile Met Asp Gln Val Pro Phe Ser Val
31 1 5
33 <210> SEQ ID NO: 2
35 <211> LENGTH: 9
37 <212> TYPE: PRT
C--> 39 <213> ORGANISM: Artificial
43 <220> FEATURE:
45 <223> OTHER INFORMATION: synthetic peptide
47 <400> SEQUENCE: 2
49 Tyr Leu Glu Pro Gly Pro Val Thr Val
50 1 5
52 <210> SEQ ID NO: 3
54 <211> LENGTH: 9
56 <212> TYPE: PRT
C--> 58 <213> ORGANISM: Artificial
62 <220> FEATURE:
64 <223> OTHER INFORMATION: synthetic peptide
66 <400> SEQUENCE: 3
68 Leu Leu Phe Gly Tyr Pro Val Tyr Val
69 1 5
71 <210> SEQ ID NO: 4
73 <211> LENGTH: 1048
75 <212> TYPE: DNA
77 <213> ORGANISM: Homo sapiens
81 <400> SEQUENCE: 4
82 atgatccagc gtactccaaa gattcaggtt tactcacgtc atccagcaga gaatggaaag 60
84 tcaaatttcc tgaattgcta tgtgtctggg tttcatccat ccgacattga agttgactta 120
86 ctgaagaatg gagagagaat tgaaaaagtg gagcattcag acttgtcttt cagcaaggac 180
88 tggctctttct atctcttgta ttatactgag ttcaccccca ctgaaaaaga tgagtatgcc 240

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/073,300

DATE: 07/09/2002

TIME: 14:03:46

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\07092002\J073300.raw

```

90  tgcggtgtga accacgtgac tttgtcacag cccaagatag ttaagtggga tcgagacatg      300
92  ggtggcggtg gaagcggcgg tggaggctct ggtggaggtg gcagcggctc tcactccatg      360
94  aggtattttct tcacatccgt gtcccggccc ggccgcgggg agccccgctt catcgcatgt      420
96  ggctacgtgg acgacacgca gttcgtgcgg ttcgacagcg acgccgcgag ccagaggatg      480
98  gagccgcggg cgccgtggat agagcaggag ggtccggagt attgggacgg ggagacacgg      540
100 aaagtgaagg ccactcaca gactcaccga gtggacctgg ggacctgctg cggtactactac      600
102 aaccagagcg aggcgggttc tcacaccgtc cagaggatgt atggctgcga cgtggggctg      660
104 gactggcgct tcctccgcgg gtaccaccag tacgcctacg acggcaagga ttacatcgcc      720
106 ctgaaagagg acctgcgctc ttggaccgcg gcggacatgg cagctcagac caccaagcac      780
108 aagtgggagg cggcccatgt ggcggagcag ttgagagcct acctggaggg cacgtgcgtg      840
110 gagtggctcc gcagatacct ggagaacggg aaggagacgc tgcagcgcac ggacgcccccc      900
112 aaaacgcaca tgactcacca cgctgtctct gaccatgaag ccacctgag gtgctggggcc      960
114 ctgagcttct accctgcgga gatcacactg acctggcagc ggacttggag gaatctttga     1020
116 ggcaatgaag atggagctgc gggactga                                     1048

```

119 <210> SEQ ID NO: 5

121 <211> LENGTH: 415

123 <212> TYPE: PRT

C--> 125 <213> ORGANISM: Artificial

129 <220> FEATURE:

131 <223> OTHER INFORMATION: human beta2 microglobulin linked to MHC class I heavy chain

133 <400> SEQUENCE: 5

```

135 Met Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala
136 1           5           10           15
138 Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His
139           20           25           30
141 Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu
142           35           40           45
144 Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr
145           50           55           60
147 Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala
148 65           70           75           80
150 Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp
151           85           90           95
153 Asp Arg Asp Met Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
154           100          105          110
156 Gly Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser
157           115          120          125
159 Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp
160          130          135          140
162 Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met
163 145          150          155          160
165 Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp
166           165          170          175
168 Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp
169           180          185          190
171 Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly Ser His
172           195          200          205
174 Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe
175          210          215          220

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/073,300

DATE: 07/09/2002

TIME: 14:03:46

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\07092002\J073300.raw

```

177 Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala
178 225                230                235                240
180 Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln
181                245                250                255
183 Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg
184                260                265                270
186 Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu
187                275                280                285
189 Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met
190                290                295                300
192 Thr His His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala
193 305                310                315                320
195 Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly
196                325                330                335
198 Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly
199                340                345                350
201 Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln
202                355                360                365
204 Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro
205                370                375                380
207 Leu Thr Leu Arg Trp Glu Gln Ser Thr Arg Gly Gly Ala Ser Gly Gly
208 385                390                395                400
210 Gly Leu Gly Gly Ile Phe Glu Ala Met Lys Met Glu Leu Arg Asp
211                405                410                415
213 <210> SEQ ID NO: 6
215 <211> LENGTH: 280
217 <212> TYPE: PRT
219 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 6
225 Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg Pro Gly
226 1                5                10                15
228 Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Gln
229                20                25                30
231 Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met Glu Pro Arg
232                35                40                45
234 Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly Glu Thr
235                50                55                60
237 Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu Gly Thr
238 65                70                75                80
240 Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly Ser His Thr Val Gln
241                85                90                95
243 Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu Arg Gly
244                100               105               110
246 Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu Lys Glu
247                115               120               125
249 Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr Thr Lys
250                130               135               140
252 His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala Tyr Leu
253 145                150                155                160

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/073,300

DATE: 07/09/2002

TIME: 14:03:46

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\07092002\J073300.raw

255 Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
 256 165 170 175
 258 Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr His His
 259 180 185 190
 261 Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe
 262 195 200 205
 264 Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
 265 210 215 220
 267 Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr
 268 225 230 235 240
 270 Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln Arg
 271 245 250 255
 273 Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu
 274 260 265 270
 276 Arg Trp Glu Gln Ser Thr Arg Gly
 277 275 280

279 <210> SEQ ID NO: 7

281 <211> LENGTH: 100

283 <212> TYPE: PRT

285 <213> ORGANISM: Homo sapiens

289 <400> SEQUENCE: 7

291 Met Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala
 292 1 5 10 15
 294 Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His
 295 20 25 30
 297 Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu
 298 35 40 45
 300 Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr
 301 50 55 60
 303 Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala
 304 65 70 75 80
 306 Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp
 307 85 90 95
 309 Asp Arg Asp Met
 310 100

312 <210> SEQ ID NO: 8

314 <211> LENGTH: 36

316 <212> TYPE: DNA

C--> 318 <213> ORGANISM: Artificial

322 <220> FEATURE:

324 <223> OTHER INFORMATION: synthetic oligonucleotide

326 <400> SEQUENCE: 8

327 aggagatata catatgggct ctcaactccat gaggta

36

330 <210> SEQ ID NO: 9

332 <211> LENGTH: 43

334 <212> TYPE: DNA

C--> 336 <213> ORGANISM: Artificial

340 <220> FEATURE:

342 <223> OTHER INFORMATION: synthetic oligonucleotide

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/073,300

DATE: 07/09/2002

TIME: 14:03:46

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\07092002\J073300.raw

```

344 <400> SEQUENCE: 9
345 cgggctttgt tagcaccgat tcataggtga ggggcttggg caa
348 <210> SEQ ID NO: 10
350 <211> LENGTH: 15
352 <212> TYPE: PRT
C--> 354 <213> ORGANISM: Artificial
358 <220> FEATURE:
360 <223> OTHER INFORMATION: linker peptide
362 <400> SEQUENCE: 10
364 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
365 1 5 10 15
367 <210> SEQ ID NO: 11
369 <211> LENGTH: 35
371 <212> TYPE: DNA
C--> 373 <213> ORGANISM: Artificial
377 <220> FEATURE:
379 <223> OTHER INFORMATION: synthetic oligonucleotide
381 <400> SEQUENCE: 11
382 ggagatatac atatgatcca gcgtactcca aagat
385 <210> SEQ ID NO: 12
387 <211> LENGTH: 49
389 <212> TYPE: DNA
C--> 391 <213> ORGANISM: Artificial
395 <220> FEATURE:
397 <223> OTHER INFORMATION: synthetic oligonucleotide
399 <400> SEQUENCE: 12
400 cgggctttgt tagcagccga attcattaca tgtctcgatc ccacttaac
403 <210> SEQ ID NO: 13
405 <211> LENGTH: 41
407 <212> TYPE: DNA
C--> 409 <213> ORGANISM: Artificial
413 <220> FEATURE:
415 <223> OTHER INFORMATION: synthetic oligonucleotide
417 <400> SEQUENCE: 13
418 ggaaggcgtt ggcgcatatg atccagcgta ctccaaagat t
421 <210> SEQ ID NO: 14
423 <211> LENGTH: 50
425 <212> TYPE: DNA
C--> 427 <213> ORGANISM: Artificial
431 <220> FEATURE:
433 <223> OTHER INFORMATION: synthetic oligonucleotide
435 <400> SEQUENCE: 14
436 ggaagcggcg gtggaggctc tggaggaggt ggcagcggct ctactccat
439 <210> SEQ ID NO: 15
441 <211> LENGTH: 50
443 <212> TYPE: DNA
C--> 445 <213> ORGANISM: Artificial
449 <220> FEATURE:
451 <223> OTHER INFORMATION: synthetic oligonucleotide

```